

CLAIMS

WHAT IS CLAIMED IS:

1. A projector, comprising:
a housing for housing circuitry configured to generate an image, said housing including a bottom surface;
a lens configured to focus said image; and
a swivel base coupled to said bottom surface of said housing;
wherein said lens is aimed in a horizontal plane by swiveling said housing on said swivel base.
2. The projector of claim 1, further comprising:
a lens tube containing said lens;
a lens track on said housing;
wherein said lens tube is configured to translate along said lens track to vertically position said lens.
3. The projector of claim 2, wherein said lens tube is configured to translate along said lens track such that said lens is vertically positioned at an angle between 0 and 90 degrees with respect to said swivel base.
4. The projector of claim 2, wherein said lens tube is configured to translate along said lens track such that said lens is vertically positioned at an angle between 0 and 180 degrees with respect to said swivel base.
5. The projector of claim 2, wherein said translation of said lens tube along said lens track is motorized.
6. The projector of claim 1, wherein said swiveling of said housing is motorized.

7. The projector of claim 1, wherein said swivel base is configured to be coupled to a ceiling.

8. The projector of claim 1, further comprising a light source, said light source associated with said housing.

9. The projector of claim 1, further comprising a lens tube containing said lens, wherein said lens tube is coupled to said housing such that said lens tube swivels with respect to said housing.

10. The projector of claim 9, wherein said swivel base is configured to be coupled to a ceiling.

11. The projector of claim 9, wherein said swiveling of said lens tube is motorized.

12. The projector of claim 1, wherein said swivel base is coupled to a vertical stand having an adjustable height.

13. The projector of claim 1, further comprising an optical disc drive to play an optical disc.

14. The projector of claim 1, further comprising a lens cover for covering said lens when said lens is not in use.

15. The projector of claim 1, further comprising function controls disposed on said housing to control functions of said projector.

16. The projector of claim 1, wherein said housing is configured to swivel 360 degrees in said horizontal plane.

17. The projector of claim 1, wherein said image comprises a video image.
18. The projector of claim 1, wherein said image comprises a still image.
19. The projector of claim 1, wherein said housing is hemispherically shaped.
20. The projector of claim 1, further comprising a motor for moving said housing on said swivel base.
21. The projector of claim 1, further comprising a détente mechanism between said housing and said swivel base to inhibit movement of said housing with respect to said swivel base.
22. A projector, comprising:
 - a spherical housing for housing circuitry configured to generate an image;
 - a lens in said housing for projecting said image; and
 - a concave base for supporting said spherical housing;wherein said lens is aimed in a desired direction by positioning said spherical housing with respect to said concave base.
23. The projector of claim 22, wherein said concave base is coupled to a vertical stand having an adjustable height.
24. The projector of claim 22, further comprising an optical disc drive to play an optical disc.

25. The projector of claim 22, further comprising a lens cover for covering said lens when said lens is not in use.
26. The projector of claim 22, further comprising function controls on said housing for controlling functions of said projector.
27. The projector of claim 22, wherein said image comprises a video image
28. The projector of claim 22, wherein said image comprises a still image.
29. A method of making a projector, said method comprising:
providing a housing for housing circuitry configured to generate an image, said housing including a bottom surface; and
coupling a swivel base to said bottom surface of said housing.
30. The method of claim 29, further comprising:
coupling a lens track to said housing; and
coupling a lens tube containing a lens to said housing and said lens track.
31. The method of claim 30, further comprising configuring said lens tube to translate along said lens track.
32. The method of claim 30, further comprising configuring said lens tube and said housing to be controlled manually.
33. The method of claim 30, further comprising motorizing said lens tube to move with respect to said lens track.

34. The method of claim 30, further comprising motorizing said swivel base.

35. The method of claim 29, further comprising providing a détente mechanism to inhibit movement of said housing with respect to said swivel base until a minimum force is applied.

36. The method of claim 29, further comprising configuring said swivel base to be coupled to a ceiling.

37. The method of claim 29, further comprising coupling a light source to said housing.

38. The method of claim 29, further comprising:
coupling a lens tube containing a lens to said housing; and
configuring said lens tube to pivot with respect to said housing.

39. The method of claim 38, further comprising configuring said lens tube to be pivoted manually.

40. The method of claim 38, further comprising motorizing said lens tube to pivot with respect to said housing.

41. A method of making a projector, said method comprising:
providing a spherical housing for housing circuitry configured to generate an image;
providing a lens in said spherical housing configured to focus said image;
and
supporting said housing with a concave base.

42. The method of claim 41, further comprising coupling a lens tube in said spherical housing, said lens tube containing said lens.

43. The method of claim 41, further comprising providing a height-adjustable stand for supporting said concave base.

44. A projector, comprising:
circuitry configured to generate an image;
a lens for projecting said image;
a housing for said circuitry; and
means for moving said lens with respect to said housing to direct a projected image in a desired direction.

45. The projector of claim 44, further comprising
a vertical translation means coupled to said housing means, wherein said lens is disposed in a lens tube configured to move along said vertical translation means.

46. The projector of claim 44, wherein said lens tube is configured to translate along said translation means between angles of 0 and 90 degrees with respect to a horizontal plane.

47. The projector of claim 44, further comprising a swivel base on which said housing is mounted for swiveling said housing to facilitate pointing said lens in said desired direction.

48. The projector of claim 44, wherein said housing is configured to be coupled to a ceiling.

49. The projector of claim 48, further comprising a light source means, said light source means associated with said housing means.

50. The projector of claim 44, wherein said means for moving are configured to be manually controlled.

51. The projector of claim 44, wherein said means for moving comprise a lens tube housing said lens, wherein said lens tube is configured to pivot with respect to said housing.

52. The projector of claim 44, further comprising means for playing an optical disc.

53. The projector of claim 44, further comprising means for covering said lens when said lens is not in use.

54. A projector, comprising:
circuitry configured to generate an image;
a lens for projecting said image;
a housing for said circuitry; and
means for rotating said housing with respect to a housing base to direct a projected image in a desired direction.

55. The projector of claim 54, further comprising
a vertical translation means coupled to said housing means, wherein said lens is disposed in a lens tube configured to move along said vertical translation means with respect to said housing.

56. The projector of claim 55, wherein said lens tube is configured to translate along said translation means between angles of 0 and 90 degrees with respect to a horizontal plane.

57. The projector of claim 54, wherein said housing is configured to be coupled to a ceiling.

58. The projector of claim 57, further comprising a light source means, said light source means associated with said housing means.

59. The projector of claim 54, wherein said means for rotating are configured to be manually controlled.

60. The projector of claim 54, further comprising a lens tube housing said lens, wherein said lens tube is configured to pivot with respect to said housing.

61. The projector of claim 54, further comprising means for playing an optical disc.

62. The projector of claim 54, further comprising means for covering said lens when said lens is not in use.